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| DDE ADDEAL DOLES DEQUEST TO | | Docket Number (Opt | Bonal) | |
| PRE-APPEAL BRIEF REQUEST FOR REVIEW | | 99-836 RCE1 | | |
| hereby certify that this correct and he had a large to the large to th | | | | |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail | Application N | umber | Filed | |
| in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] | 09/593,116 | | June 13, 2000 | |
| on April 7, 2006 | First Named I | nventor | | |
| Signature Christian L. Uncleasen | James Howar | d DREW | | |
| Typed or printed | 1311.5 | | | |
| name Christian R. Andersen | Art Unit | | Examiner | |
| | 3639 | | Robinson Boyce, Akiba K | |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. | | | | |
| The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. | | | | |
| I am the | | | | |
| applicant/inventor. — Goll Well | | | | |
| | | // Sig | Juature | |
| assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) Is enclosed. | | • | | |
| Oct 37 CFR 5.71. Statement under 37 CFR 3.73(b) is enclosed. | Joel Wall, Esq. Typed or printed name | | | |
| attorney or agent of record. | | i yped Qi | printed name | |
| Registration number | | 072 | 749 4900 | |
| | | | 972-718-4800 Telephone number | |
| attorney or agent acting under 37 CFR 1.34. | | • | | |
| Registration number if acting under 37 CFR 1.34 25,648 | | | 7. 2006 Date | |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*. | | | | |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form end/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT: Mail Stop AF Docket No. 99-836 RCE1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re | Application of: |) | |
|-----------------------------|-----------------------------------------------------------------------------------------|-----------------------------------|--|
| James | Howard DREW et al. |) Group Art Unit: 3639 | |
| Application No.: 09/593,118 | | Examiner: Robinson Boyce, Akiba K | |
| Filed: | June 13, 2000 |) | |
| For: | A METHOD FOR EVALUATING CUSTOMER VALUE TO GUIDE LOYALTY AND RETENTION PROGRAMS |) Confirmation No.: 5555)) | |
| | nissioner for Patents | | |
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| Alexa | ndria, VA 22313-1450 | | |
| Sir | | | |

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request a pre-appeal brief review of the final Office Action mailed January 10, 2006 ("Office Action"). This Pre-Appeal Brief Request is being filed concurrently with a Notice of Appeal under 37 C.F.R. § 41.31 and prior to the filing of an Appeal Brief.

In the Office Action, claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, 62-64, and 66-69 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,064,731 ("Flockhart") in view of the Bank Marketing International article entitled "Are your customers profitable?" ("Bank Marketing"); and claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59-61, 70 and 71 were rejected under 35 U.S.C. § 103(a) as unpatentable over Flockhart in view of Bank Marketing and further in view of U.S. Patent No. 6,411,936 ("Sanders"). Applicants submit that the rejections are legally and factually deficient for at least the following reasons.

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I. Section 103(a) Rejection based on Flockhart and Bank Marketing

The rejection of claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, 62-64, and 66-69 is legally and factually erroneous because, as discussed below, *prima facte* obviousness has not been established based on the applied references.

For at least the reasons explained on pages 6-13 of Applicants' Reply to Office Action filed March 16, 2005 ("Reply") and on pages 23-34 of Applicants' Amendment filed October 31, 2005 ("Amendment"), the Examiner failed to establish that the applied art teaches or suggests each and every feature of Applicants' claims. For example, Flockhart and Bank Marketing fail to teach or suggest at least "generating . . . a hazard function for an existing customer . . . based on . . . [a] hazard function model and account data associated with the customer and corresponding to the attributes," as recited in claim 1. The applied art further fails to teach or suggest "calculating a gain in lifetime value for the customer based on a change in the hazard function model resulting from a retention effort," as recited in claim 1.

Independent claims 16, 31, and 46, although different in scope from claim 1 and each other, recite features similar to the "generating" and "calculating" features of claim 1. The applied art likewise fails to teach or suggest these features in claims 16, 31, and 46. Further, as explained in Applicants' Reply and Amendment, the applied art fails to teach or suggest at least "identifying a temporal-based retention effort based on the hazard function . . ." and "calculating . . . an expected gain in value from the identified retention effort," as recited in independent claim 63.

Claim 62 depends upon claim 61. As affirmed by the Examiner, Flockhart and Bank

Marketing fail to teach or suggest each and every feature of claim 61. See Office Action at p. 16.

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These references therefore do not support a § 103(a) rejection of claim 62, which requires all of the features of claim 61.

For at least the foregoing reasons, prima facie obviousness has not been established. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Further, the requisite motivation to combine or modify the references is lacking. See Reply, pp. 6-13; see also Amendment, pp. 23-34. According to the Federal Circuit, an examiner may find every element of a claimed invention in the prior art but mere identification is not sufficient to negate patentability. See e.g., In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998) (citations omitted). The desire to combine or modify references must be supported by "clear and particular" evidence. In re Dembicziak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

In this case, the Office Action does not show that a skilled artisan considering the applied art, and not having the benefit of Applicants' disclosure, would have been motivated to combine the references in the manner claimed. Instead, the Examiner merely alleged that applied art disclose certain features without showing a proper motivation, supported by evidence, to combine the teachings of the references. Moreover, the Examiner's factual determinations are not properly supported. For example, the Examiner alleged that a skilled artisan would have combined the references "to calculate a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort with the motivation of determining the customers likelihood of switching during the time the customer is committed to the business."

Office Action at p. 4. That allegation is not properly supported and does not establish the requisite motivation. The Examiner does not show the alleged motivation to be present in the cited art or in the knowledge available to a skilled artisan. Applicants submit that teachings of the present application were improperly used in hindsight to reconstruct the prior art. Because

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the Examiner failed to establish the requisite motivation, prima facie obviousness has not been established. See In re Rouffet, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998).

II. Section 103(a) Rejection based on Flockhart, Bank Marketing and Sanders

The Examiner's rejection of claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59-61, 70, and 71 is legally and factually erroneous because *prima facie* obviousness has not been established based on the cited art.

For at least the reasons explained in Applicants' Reply (see pages 13-16) and Applicants' Amendment (see pages 34-38), the Examiner failed to establish that the applied art teaches or suggests each and every feature of Applicants' claims. Each of claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60 depends upon one of claims 1, 16, 31, and 46. As discussed above, Flockhart and Bank Marketing fail to teach or suggest each and every feature recited in claims 1, 16, 31 and 46. Additionally, Sanders fails to teach or suggest at least the "generating" and "calculating" subject matter recited in claims 1, 16, 31, and 46 and required by dependent claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60. Sanders thus does not cure the deficiencies of Flockhart and Bank Marketing and does not support the Examiner's § 103(a) rejection.

As to independent claim 61 and dependent claims 70 and 71, the Examiner has not established that the applied art discloses or suggests at least "calculating . . . a gain in lifetime value" and a "multi-layer feed forward neural network," as claimed. The Examiner further failed to establish that the applied art discloses or suggests at least "training the neural network comprises loading an input layer of the neural network with values representing the set of attributes for the plurality of current customer accounts," as recited in dependent claim 71.

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Moreover, the requisite motivation to combine Flockhart, Bank Marketing and Sanders is lacking. See Reply, pp. 13-16; see also Amendment, pp. 34-38. For example, the Examiner's allegation that a skilled artisan would have combined Sanders with the alleged Flockhart-Bank Marketing combination "to incorporate a . . . [multilayer] feed-forward neural network with the motivation of utilizing this type of intelligence to determine the possibility of churn" (Office Action at p. 16) is not properly supported and does not establish the required motivation to combine the references. The Examiner does not show that the references suggest the desirability of "utilizing [a multilayer feed-forward neural network] to determine the possibility of churn," as alleged. The Examiner also fails to show that the alleged motivation is present in the knowledge generally available to a skilled artisan. The Examiner fails to provide any explanation as to why a skilled artisan would have been motivated to utilize a multilayer feed-forward neural network to determine the possibility of churn, other than to attempt meet the terms of Applicants' claims. Applicants submit that teachings of the present application were improperly used in hindsight to reconstruct the prior art.

In view of the foregoing, Applicants request a pre-appeal brief review of the rejections in the Office Action. Applicants request withdrawal of the outstanding rejections and the timely allowance of pending claims 1-71.

Please grant any extensions of time required to enter this paper and charge any additional required fees to our deposit account 07-2347.

Respectfully submitted,

Dated: April 7, 2006

Joel Wall